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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/325,508	06/03/1999	MICHAEL A. CHACK	P0056	2904

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EXAMINER

THOMPSON, MARC D

ART UNIT	PAPER NUMBER
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2152

DATE MAILED: 07/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.
09/325,508

Applicant(s)

CHACK

Examiner
Marc Thompson

Art Unit
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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jun 3, 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 1-20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

1. This application has been examined.
2. Claims 1-20 are presented for examination.

Election/Restriction

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-11, and 16-20, drawn to controlling network resource allocation, classified in class 709, subclass 226.
 - II. Claims 12-15, drawn to software licensing availability/network application access controlling, classified in class 709, subclass 229.
4. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility for determining resources availability and allocation of network service(s) which is separately usable with or without invention II, which provides software licensing restrictions for network application access. See MPEP § 806.05(d).
5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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6. During a telephone conversation with William Davis (Reg. #38,428) on 6/25/2002, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-11, and 16-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 12-15 are withdrawn from further consideration by the Examiner, (See 37 CFR 1.142(b)), as being drawn to a non-elected invention.

Priority

7. This application claims priority to provisional application number 60/121,214, filed February 22, 1999. Thus, the effective filing date for the subject matter defined in the pending claims in this application is 2/22/1999.

Drawings

8. The drawings submitted on 6/3/1999 have been approved by the Draftsperson, and Examiner contends that the drawings are acceptable for examination purposes.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 1-11, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foladare et al. (U.S. Patent Number 5,907,547), hereinafter referred to as Foladare, in view of Jin et al. (U.S. Patent Number 6,189,033), hereinafter referred to as Jin.

11. The disclosed and claimed invention details functionality which determines whether a given function (connection, software access, network service, etc.) is possible given the current system resources are available (idle/unused circuit or availability of port, socket, bandwidth, etc.), and when not available, the system will wait until resources are available until “queuing” the request for subsequent processing. At that time, the user/client/agent is polled/queried to determine whether the processing should occur/proceed. The requesting clients are connected via generalized network types to the serving computers, are time limited for response to the polling operation(s), and are optionally prioritized during the “queuing” process, as described in various dependent claims.

Foladare disclosed a system where Internet accessing clients effected connection(s) (telephone, Internet, etc.) between themselves and a remote server or human customer service representative. See inter alia, Abstract, Column 2, Lines 28-47. The requesting client was provided with a “notification applet”, which informed the client when a special notification packet was received in order to report resources (i.e., the human representative) had become available. At this time, the client was given the option to respond to reception of the notification packet. See Column 2, Lines 10-27. If the client responded during some arbitrary, determined interval, the connection was effected, otherwise, failure to respond within this interval resulted in

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request cancellation. See Column 4, Lines 38-45. Foladare also envisioned multiple connections between the parties simultaneously, utilizing computer terminals on each end of the communication. See Column 2, Lines 28-39. Foladare also disclosed use of the invention with the provision for access to network services, as opposed to exclusive telephony use between human client(s) and representative(s), including express inclusion for use over various network mediums and transport mechanisms including intranet(s), Internet(s), public telephone network(s), wide area distributed computing environments, and Internet telephony services. See Column 8, Lines 8-30.

While Foladare disclosed the invention substantially as claimed, Foladare did not expressly disclose the measurement and comparison of “available/required resources”, rather, only the binary (yes or no) availability of a particular resource, the human (or computer terminal) representative to which connection was desired. See, inter alia, Column 1, Lines 44-49, and Column 2, Lines 18-27. Also, while Foladare did expressly suggest enabling online services accessible through the server(s) (Column 8, Lines 27-30), Foladare did not expressly mention any particulars of these services, or what this generalized term was meant to encompass. An ordinary artisan would have been motivated to search the related Internet and network services arts to find some examples of these suggested network services usable with the Foladare invention as disclosed, as well as exploring other described variants of the system (e.g., merchant facility utilizing a sole server, server cluster, geographically remote computers, etc., per Foladare, Column 8, Lines 8-18) for direct implementation of the invention on such systems, as suggested.

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In the same art of Internet communications and content delivery, network connection establishment, and request queuing, Jin disclosed teachings relating to performance guarantees, an inherent problem in the networking arts. Additionally, the Jin system also disclosed overload protection (efficient use of computer(s) for response to client requests) and quantified, deterministic decision methodology for client request queuing resulting in acceptance, deferral, or denial of service fulfillment. See inter alia, Column 2, Lines 24-55. The environment of the Jin system was very similar to the Foladare system; Jin disclosed an interconnect network coupling the client(s) to a data access networking system providing data delivery services. See Figure 1, Column 3, Lines 18-26, and Column 4, Lines 10-19. Specifically, the system provided data delivery services to requesting clients over an intranet or global WAN Internet. See Column 4, Lines 36-49. The system utilized an admission control policy serving to provide responses to requesting clients only when appropriate resources were available. See Column 6, Line 38 through Column 7, Line 15. Lastly, the Jin system used a "submission queue", where requests for services were forwarded ("queuing") after determination of sufficient resources was decided. See Column 8, Lines 46-65. Thus, the combined system of Foladare and Jin disclosed all the limitations of the claimed invention as set forth in claims 1-6, 8-17, and 19-20, as follows:

a. *Receiving a request from a remote user for services through the communication network*, was taught by Foladare, inter alia, in Column 2, Lines 10-3, and Column 5, Lines 9-14, and was taught by Jin, inter alia, in Column 7, Lines 16-23.

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b. *Establishing a connection between the remote user and the communication network if it is determined that a sufficient amount of resource are available to process the request*, was substantially taught by Foladare in Column 3, Line 52 through Column 4, Line 29, and was expressly taught by Jin, inter alia, in Column 8, Lines 46-50.

c. *Sending a signal to the remote user if it determined that a sufficient amount of resources are not available to process the request*, was disclosed as background information by Foladare in Column 1, Lines 44-49, expressly taught by Jin, inter alia, in Column 7, Lines 7-11.

d. *Queuing the remote user once a sufficient amount of resources are available to process the request*, was expressly taught by Jin, inter alia, in Column 7, Lines 16-25.

e. *Receiving a second request from the remote user in response to the queuing of the remote user and establishing a connection between the remote user and the communication network*, was taught by Foladare in Column 4, Lines 8-29.

f. *Connection between the remote user and the communication network is established over an Internet*, was taught by Foladare in Column 3, Lines 2-8, and was taught by Jin in Column 3, Lines 18-26, and Column 4, Lines 10-19.

g. *Connection between the remote user and the communication network is established over a LAN*, was taught by Foladare in Column 3, Lines 2-8, and was taught by Jin in Column 3, Lines 18-26, and Column 4, Lines 10-19, through use of an arbitrary "intranet".

h. *Connection between the remote user and the communication network is established over a telephone line*, was taught by Foladare in Column 3, Lines 2-8, and was taught by Jin in

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Column 3, Lines 18-26, and Column 4, Lines 10-19. Also note the express teachings of Foladare providing coupling of the “remote user” and the customer service representative using telephony, as well as the notoriously well known prior art usage of modems for data communications (e.g., Internet connections) over standard PSTN network(s).

i. *Connection is established only if the second request is received from the remote user within a predetermined interval*, was taught by Foladare in Column 4, Lines 38-44.

j. *Further comprising the step of giving the remote user priority over other users*, was taught by Jin in Column 8, Lines 55-65, through use of the submission queue. By definition, a queue provided priority to the next (lead) queued user/job/transaction over the priority given to other queued users/jobs/transactions within the queue.

k. *The signal includes a message to the remote user indicating that a connection will not be immediately established*, was substantially taught by Foladare in Column 3, Lines 52-62, and Column 1, Lines 44-47, and was expressly taught by Jin, inter alia, in Column 7, Lines 7-11.

l. *Receiving requests from a plurality of remote devices for access to the communication network*, was taught by Foladare in Column 2, Lines 28-48, and was taught by Jin in Column 4, Lines 36-49. Access to an arbitrary “internal” network resource equated to access to the communication network (network supplying communication).

m. *Establishing connections between the communication network and a first group of the remote devices*, was taught by Jin in Column 4, Lines 10-49. The first user clients to request connections (the requests already in the queue(s)), were provided connections.

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n. *Sending a signal to the remaining remote devices for which a connection is not established indicating that a connection was not established*, was taught by Foladare in Column 1, Lines 44-47, and was taught by Jin in Column 7, Lines 7-11.

o. *Queuing at least some of the remaining remote devices at a later time*, was taught by Jin in Column 9, Line 64 through Column 10, Line 8. This was known as “deferring”, described as known technology by Jin at Column 9, Lines 54-63.

p. *Establishing a connection between the communication network and the queued remote devices*, was taught by Jin, inter alia, in Column 7, Lines 58-60. As clearly disclosed by Jin, all requests which were submitted to the submission queue (103), were subsequently processed by application (106). Since the Jin invention dealt directly with which requests were added to the submission queue, and this application was an arbitrary network service, the described invention as set forth in this claim is fully met by the teachings.

q. *Connection between the remote user and the communication network is only performed for remote devices which respond to the queue*, was taught by Foladare in Column 6, Lines 9-27.

r. *Receiving requests by remote systems for access to the web server*, was taught by Jin in Column 5, Lines 51-52.

s. *Establishing connections between the web server and a limited number of the remote systems*, was taught by Jin, inter alia, in Column 6, Lines 45-47.

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t. *Sending a messages to the remaining remote systems that a connection is not available*, was taught by Foladare in Column 1, Lines 44-47, and was taught by Jin in Column 7, Lines 7-15.

u. *Queuing at least one of the remaining systems once a connection between the web server and the queued remote system is available*, was taught by Foladare in Column , Lines , and was taught by Jin, inter alia, in Column 9, Line 64 through Column 10, Line 8.

v. *Determining the IP address of each of the remote systems requesting access to the web server*, was inherent in the function of both the Foladare and Jin systems separately, since, in order to deliver requested response data (or an inability condition), the network address (in a TCP/IP network such as an Internet, an IP address) of the requestor MUST be determined, and was known to be present in the header of the request. Otherwise, there would have been no way to route the response data to the requestor.

w. *Remaining systems are queued using the IP addresses*, was disclosed by Jin in Column 8, Lines 49-50. Since the requests themselves were queued, and the requests contained IP addresses (in order to respond/route data to the requesting client), the queued systems were queued using IP addresses.

x. *Establishing a connection with at least one of the remaining remote systems is performed only if the at least one of the remaining remote systems responds to the queue*, was taught by Foladare, inter alia, in Column 4, Lines 8-29.

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The combination of the Foladare and Jin systems would have been obvious to one of ordinary skill in the art at the time the invention was made, since Foladare directly suggested the use of the system for network information services (Foladare, Column 8, Lines 27-30), and Jin dealt directly with a data service system with overload protection (Jin, Column 2, Lines 24-27). The system of Jin also addressed the same problem as the Foladare system; if resources were unavailable (no representatives), some type of queuing system for requesting customers was clearly required, so that the customers were served in a timely fashion, avoiding an overload situation. See Foladare, Column 3, Lines 30-36, and Jin, Column 1, Line 53 through Column 2, Line 8. Thus, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system of Foladare with the overload protection and data content delivery mechanisms of Jin, in order to result in a more efficient system which provided data network services upon user request.

Claims 1-11, and 16-20 are rejected.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Morales et al. (U.S. Patent Number 5,440,741) disclosed acceptance, deferral, or denial of user client requests through the use of request queuing to avoid overload conditions.

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b. Madduri (U.S. Patent Number 5,526,524) disclosed "camp on" functionality for use with locked networked resources/services on a LAN (logically equivalent to any other type of addressed network). This allowed users to access network services when resources (access ability) became available.

c. Hamadani et al. (U.S. Patent Number 5,742,757) disclosed prioritized queuing of user client license requests for access of network software.

d. Conte et al. (U.S. Patent Number 5,845,065) disclosed the control of remote network device operations using "waiting lists" (queues) to provide "fairness" (prioritizing) in distribution of licenses for network service application usage.

e. Schaffer et al. (U.S. Patent Number 6,411,601) disclosed call/connection establishment using determined system resources and required resource comparison, in combination with request queues, time intervals, and "camp on" features. Additionally, the invention was fully operational in an IP addressed networking environment, as well as public telephony networks.

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marc Thompson whose telephone number is (703) 308-6750. The Examiner can normally be reached on Monday-Friday from 9am to 4pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mark Rinehart, can be reached at (703) 305-4815.

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The fax phone numbers for the organization where this application is assigned are as follows:

(703) 746-7238	(After Final Communications only)
(703) 746-7239	(Official Communications)
(703) 746-7240	(for Official Status Inquiries, Draft Communications only)

Inquiries of a general nature relating to the general status of this application or proceeding should be directed to the 2100 Group receptionist whose telephone number is (703) 305-3900.

MARC THOMPSON
Marc D. Thompson
Patent Examiner
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